REMARKS

Claims 1-5, and 13-17 were rejected under 35 U.S.C. § 103 as being unpatentable over Noble in view of Foley. This rejection is respectfully traversed.

The Examiner acknowledges that Noble fails to teach an analysis file which does not contain imaging data, said analysis file containing mathematics representing the model surface. The Examiner relies on Foley for teaching an analysis file containing mathematics representing the model surface and proposes combing Foley with Noble because such a modification would save space.

Applicants submit that there is insufficient motivation to provide such analysis files in Noble. Noble is concerned with generating the best field of view for graphically depicting IC structures. Thus, the data necessary in Noble is graphical. There is no need in Noble for an analysis file which does not contain imaging data, said analysis file containing mathematics representing the model surface. Such data would then have to be converted into a graphical representation, increasing processing in Noble.

As noted in MPEP § 2143, the teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in applicant's disclosure. Furthermore, if proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. See MPEP § 2143.01. In the present case, Noble is concerned with generating graphical representations of IC structures. An analysis file which does not contain imaging data, but rather contains mathematics representing the model surface, would not be beneficial. This would only require additional processing time to generate the graphical depiction. Thus, there is

insufficient motivation to modify Noble with the teachings of Foley as proposed by the Examiner.

Furthermore, claim 1 recites that the analysis files are used to analyze the surface geometry of the model. The Examiner proposes using the mathematical files of Foley in Noble would reduce space. There is, however, no indication that the Noble system could determine probe placement using a mathematical representation of the surface. As described in column 20, lines 1-60, Noble teaches using a findnet program to determine probe placement. The polygon and trapezoid files 2235 include visible layer information which identifies suitable locations for probing nets (column 20, lines 42-46). It is not clear that the mathematical files taught by Foley could be used to provide "visible" layer information to locate probing nets. There is simply no expectation of success that the mathematical files in Foley could be used in Noble for the findnet program. The only basis for proposing such a combination is hindsight, which is an impermissible basis for an obviousness rejection.

In the Examiner's response to Applicants' arguments, the Examiner states that if "the Noble invention's use of a mathematics file would require additional processing, no one knows whether the savings in space (the examiner's stated motivation for combining Foley with Noble) would overcome any additional processing" (emphasis added). If "no one knows" how the resultant combination would operate, then how can there be sufficient motivation to combine the references in this manner? The lack of certainty in the benefits of the combination indicates that the Examiner is asserting an "obvious to try" basis for combining Noble and Foley. This is far from a motivation to combine the references as required in a *prima facie* case of obviousness.

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For the above reasons, claim 1 is patentable over Noble. Claims 2-5 depend from claim 1 and are patentable over Noble for at least the reasons advanced with reference to claim 1. Claims 13-17 include features similar to those discussed with reference to claim 1 and are patentable over Noble for at least the reasons advanced with reference to claim 1.

Claims 6 and 18 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Noble in view of Benson. This rejection is respectfully traversed for the following reasons.

The Examiner notes that Noble fails to teach "a list of specified surfaces on said model and data relating to the smallest possible three-dimensional region that can enclose each specified surface" and relies on Benson for teaching this feature. Benson teaches computing a viewpoint sphere by finding a smallest sphere that completely encloses objects. The viewpoint sphere, however, is not a list of surfaces on a model and data relating to the smallest possible three-dimensional region that can enclose each specified surface. The viewpoint sphere is a single sphere that contain objects to be viewed. The viewpoint sphere is used to derive views for the user. The viewpoint sphere is not the list and data as described in claims 6 and 18. Even if Noble and Benson are combined, the features of claims 6 and 18 do not result.

Thus, the rejection of claims 6 and 18 under 35 U.S.C. § 103(a) as being unpatentable over Noble in view of Benson should be withdrawn.

In view of the foregoing amendments and remarks, Applicants submit that this application is in condition for allowance. Early notification to this effect is requested.

If there are any fees due in connection with this response, please charge such fees to deposit account 06-1130.

Respectfully submitted,

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